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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 09/542,897

Filing Date: April 04, 2000

Appellant(s): CHISNELL, JERRY H.

SEP 2 6 2006

GROUP 3600

Jerry H. Chisnell
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/26/04 appealing from the Office action mailed 12/30/06.

Application/Control Number: 09/542,897

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

Claims on appeal are not presented in the appeal brief. Claims on appeal are attached at the end of the examiner answer in Appendix A.

(8) Evidence Relied Upon

4715624	Frye	12/29/1987
2809060	Thompson	10/1957
5879033	Hansel et al	3/1999

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Frye (US. 4,715,624).

Frye discloses a fluid tight conduit connecting comprising:

a female component (13);

a male component (12) positioned within the female component such that the female component circumscribes the male component;

the female component includes a mounting surface and a through bore extending through the female component, the through bore having a chamfer (tapered section near 21 in contact with 14) in the mounting surface, the chamfer and the through bore defining a transition surface therebetween;

one of the plurality of collar sections engaged in annular line contact against the tapered surface to secondarily seal the fluid tight conduit connection; and

a composite sleeve seal circumscribing the male component such that the composite sleeve seal is interposed the male and female component for sealing the fluid-tight conduit connection, the composite sleeve seal comprising:

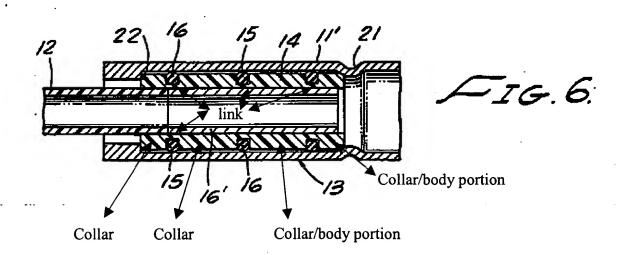
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a body portion including a plurality of collar section (collar sections as shown in figure 6 below) spaced apart from one another to define at least one gap therebetween (gap between each collar),

the plurality of collar sections being interconnected by at least one link segment (link segment as shown in fig. 6 below and being located under 16) spanning the at least one gap;

at least one seal portion (seal portion 16) interposed the plurality of collar sections in the at least one gap and surrounding the at least one link segment to interlock the at least one seal portion with the body portion to form the composite sleeve seal as one integral component;

the plurality of collar sections are made of plastic (entire 14 is made of plastic) and the at least one seal portion is made of rubber material (o-rings are made of rubber).



Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frye in view of Thompson (US. 2,809,060).

Regarding claims 4-5 and 9-10:

Frye discloses the invention substantially as claimed above but fails to disclose that the link segment comprises at least three reinforcement members (members similar to 30 of applicants) to interconnect the plurality of collar sections together. Thompson teaches a seal to have reinforcement members that extend axially and are embedded in the seal (16 embedded in seal 15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the composite sleeve seal of Frye to have reinforcement members as taught by Thompson to provide strength to the sleeve member (inherent teaching of or purpose of a reinforcement member).

Frye and Thompson disclose the invention substantially as claimed above but fail to disclose three reinforcement members. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the reinforcement members in the link segment to have three reinforcement, since have one or two or three would be considered to be a matter of design choice and would be obvious to one having ordinary skills in the art.

Regarding claims 6 and 11:

Frye and Thompson disclose the invention substantially as claimed above but fail to disclose that the reinforcement members are 120 degrees apart. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the reinforcement members into three pieces and have the members to be 120 degrees a part, as a matter of design choice.

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Regarding claim 15:

the link segment is the reinforcement member (meaning Thompson teaches a link segment embedded in a seal portion) and the seal portion is the portion that goes around the link segment (meaning that the link segment and the rings 16 described in paragraph 2 by Frye is the seal portion).

5. Claim 7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frye in view of Hansel et al (US. 5,879,033).

Frye discloses the invention substantially as claimed above but fails to disclose that one of the plurality of collar sections includes a tapered portion having a tapered surface thereon. Hansel discloses a seal having a tapered portion (4) having a tapered surface at a collar section (collar having the tapered surface 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the collar of Frye to have a tapered portion having a tapered surface thereon as taught by Hansel to provide easier insertion of the composite sleeve seal.

(10) Response to Argument

Applicant's arguments filed 8/26/04 have been fully considered but they are not persuasive.

Regarding issue A on appellants brief page 5: Applicants argument that Frye fails to teach body portion plurality of collar sections interconnected by at least one link segment spanning at least one gap between the collar sections and at least one sealed portion. As shown in the above rejection the Frye reference teaches body (body having collar sections on two sides

of 16, a gap where 16 is placed in, a sealed portion 16 placed in the gap and portion that is under 16 is the link segment).

Applicant argument that examiner has arbitrarily chosen to identify a portion of the piston as a link is not persuasive because as stated in column 4, lines 7-12, the member is not a piston but is a member 14 that acts as a seal member between a male and female members (where male member is 12 and the female member is 13). Furthermore Frye has a link segment that is below seal portion 16 as similar to appellants' link segment 30 in figure 2.

Issue B on appellants brief page 9: Applicants' argument that the examiner has not established a prima facie case of obviousness is not persuasive since Frye discloses all the limitation except that the reinforcement is in the link segment, to reinforce a seal by adding reinforcement segments is taught by Thompson. Furthermore examiner has set forth the differences in the claim over the reference (Frye shows all the limitations except for the limitations of claims 4-6 and 6-9), set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter (combining the teaching of Thompson to the invention of Frye, see paragraph 4) and explain why the proposed modification would be obvious (it would be obvious to provide a stronger seal, inherent teaching of a reinforcement member is to strengthen by additional assistance, material or support, see definition of reinforce in Merriam-Webster's Collegiate Dictionary, tenth edition, page 986). Furthermore as stated in Thompson that reinforcing is provided in a seal except for two portions of the seal at 18 and 19 (column 2, lines 15-17 of Thompson).

Issue C on appellants brief page 10: Applicants' argument against Frye and Hansel is not persuasive because Frye shows all the limitations except that one of the plurality of collar

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sections includes a tapered portion having a tapered surface thereon (set forth the differences in the claim over the reference). Hansel discloses a seal having a tapered portion (4) having a tapered surface at a collar section (collar having the tapered surface 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the collar of Frye to have a tapered portion having a tapered surface thereon as taught by Hansel (set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter) to provide easier insertion of the composite sleeve seal (explain why the proposed modification would be obvious).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Vishal Patel

Primary Examiner

Tech Center 3600

9-19-2006

Conferees:

Darnell Jayne, OWY

Patricia Engle, P2

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Appendix A

1. A composite sleeve seal comprising:

a body portion including at least one collar section having at least one link segment extending therefrom; and

at least one seal portion contiguous with said at least one collar section and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.

2. A composite sleeve seal for sealing a conduit connection, said composite sleeve seal comprising:

a body portion including a plurality of collar sections spaced apart from one another to define at least one gap therebetween, said plurality of collar sections being interconnected by at least one link segment spanning said at least one gap; and

at least one seal portion interposed said plurality of collar sections in said at least one gap and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.

- 3. A composite sleeve seal as claimed in claim 2 wherein said plurality of collar sections are made of plastic material and said at least one seal portion is made of rubber material.
- 4. A composite sleeve seal as claimed in claim 2, wherein said at least one link segment comprises three link segments interconnecting each of said plurality of collar sections together.

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5. A composite sleeve seal as claimed in claim 4, wherein said three link segments extend axially between each of said plurality of collar sections.

- 6. A composite sleeve seal as claimed in claim 5, wherein said three link segments are circumferentially spaced 120 degrees apart.
- 7. A composite sleeve seal as claimed in claim 2, wherein one of said plurality of collar sections includes a tapered portion having a tapered surface thereon.
 - 8. A fluid-tight conduit connection comprising:a female component;

a male component positioned within said female component such that said female component circumscribes said male component; and

a composite sleeve seal circumscribing said male component such that said composite sleeve seal is interposed said male and female components for sealing said fluid-tight conduit connection, said composite sleeve seal comprising:

a body portion including a plurality of collar sections interconnected by at least one link segment; and

at least one seal portion interposed said plurality of collar sections and surrounding said at least one link segment to interlock said at least one seal portion with said body portion to integrate said composite sleeve seal;

whereby said at least one seal portion is compressed by said male and said female components to primarily seal said fluid-tight conduit connection.

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9. A fluid-tight conduit connection as claimed in claim 8, wherein said at least one link segment comprises three link segments interconnecting each of said plurality of collar sections together.

- 10. A fluid-tight conduit connection as claimed in claim 9, wherein said three link segments extend axially between each of said plurality of collar sections.
- 11. A fluid-tight conduit connection as claimed in claim 10, wherein said three link segments are circumferentially spaced 120 degrees apart.
- 12. The fluid-tight conduit connection as claimed in claim 8, wherein said female component includes a mounting surface and a throughbore extending through said female component, said throughbore having a chamfer in said mounting surface, said chamfer and said throughbore defining a transition surface therebetween.
- 13. The fluid-tight conduit connection as claimed in claim 12, wherein one of said plurality of collar sections includes a tapered portion having a tapered surface, said tapered surface locating against said transition surface of said female component such that said transition surface engages in annular line contact against said tapered surface to secondarily seal said fluid-tight conduit connection.
- 15. A composite sleeve seal comprising: a body portion including at least one collar section having at least one link segment extending therefrom; and at least one seal portion disposed in axial prolongation with respect to said at least one collar section, said at least one seal portion being molded around at least a portion of said at least one link segment to interlock said at least one seal portion with said body portion to form said composite sleeve seal as one integral component.